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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages In This Submission

6

Application Number 10/588,612

Filing Date February 4, 2005

First Named Inventor Yasuo SUDA

Group Art Unit Not Yet Assigned

Examiner Name Not Yet Assigned

Attorney Docket Number 247322003700

### ENCLOSURES (check all that apply)

☐ Fee Transmittal Form - 1 pg IN DUPL

☐ Fee Attached

☐ Amendment/Reply

☐ After Final

☐ Affidavits/declaration(s)

☐ Extension of Time Request

☐ Express Abandonment Request

☒ Information Disclosure Stmt - 3 pgs

☐ Certified Copy of Priority Document(s)

☐ Response to Missing Parts/ Incomplete Application

☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Assignment Papers (for an Application)

☐ Drawing(s)

☐ Licensing-related Papers

☐ Petition

☐ Petition to Convert to a Provisional Application

☐ Power of Attorney, Relocation Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD Number of CD(s)

Remarks

☐ After Allowance Communication to Group

☐ Appeal Communication to Board of Appeals and Interferences

☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☒ Other Enclosure(s) (please identify below)

1. PTO/SB/08a/b - 2 pgs (citing 20 refs; copies of 19 refs attached)

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual Name

MICHAEL R. WARD  
Reg. No. 38,651

CUSTOMER NO. 20872

Signature

*Michael R. Ward*

Date

March 15, 2007

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MIS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: March 15, 2007

Signature:

(Lila Olsen)

SF-2284721

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.S./

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15  
Deposited March 15, 2007 signature: [Signature]

(Lisa Olsen)

Patent

Docket No. 247322005700

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Re Patent Application of:  
Yasuo SUDA et al.

Serial No.: 10/588,612

Filing Date: February 4, 2005

For: LINKER COMPOUND, LIGAND  
CONJUGATE, AND PRODUCTION  
METHODS THEREOF

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**SUPPLEMENTAL INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MS: AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of foreign documents and non-patent literature are submitted herewith. The Examiner is requested to make these documents of record.

This Supplemental Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.

sf-2279431

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.S./

- ☒ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
- ☐ A fee is required. A check in the amount of \_\_\_ is enclosed.
- ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above; accordingly, no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a check in the amount of \_\_\_ is enclosed.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)

Applicants would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other

fees due in connection with the filing of this document to Deposit Account No. 03-1952  
referencing 247322003700.

Dated: March 15, 2007

Respectfully submitted,

By Michael R. Ward  
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Substitute for form 1449/IPTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/588,612		
		Filing Date	February 4, 2005		
		First Named Inventor	Yasuo SUDA		
		Art Unit	Not Yet Assigned		
		Examiner Name	Not Yet Assigned		
Sheet	1	of	2	Attorney Docket Number	247322003700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US-2006/0030699-A1	02-09-2006	Suda	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	2.	JP-2002080488	03-19-2002	University of Osaka		
	3.	JP-2004157108	06-03-2004	Japan Science and Technology & Univ Kagoshima		

\*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by this two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>7</sup>
	4.	Plant, A.L. et al. (1995). "Phospholipid/Alkanethiol Bilayers for Cell-Surface Receptor Studies by Surface Plasmon Resonance," Analytical Biochemistry, 226:342-348.			
	5.	Liedberg, B. et al. (1995). "Biosensing with surface plasmon resonance-how it all started," Biosensors & Bioelectronics 10:i-ix.			
	6.	Horan, N. et al. (1999). "Nonstatistical binding of a protein to clustered carbohydrates," PNAS, 96(21):11782-11786.			
	7.	Arano, Akio et al. (2001). "Synthesis of a conjugate having heparin partial structure and a distal disulfide group and its application to chip technology," Chemical Society of Japan, Tentative Lecture Proceedings II in the 79th Spring Meeting, March 15, 2001, 3 pages (4G305).			
	8.	Hayashi et al. (2001). "Assembly of saccharide by multi-functional linker and application to surface plasmon resonance analysis and affinity chromatography," Tentative Lecture Proceedings, Chemical Society of Japan, volume 83, 3 pages.			
	9.	Fazio, F. et al. (2002). "Synthesis of Sugar Arrays in Microtiter Plate," J. Am. Chem. Soc., 124:14397-14402.			
	10.	Fukui, S. et al. (2002). "Oligosaccharide microarrays for high-throughput detection and specificity assignments of carbohydrate-protein interactions," Nature Biotechnology, 20:1011-1017.			
	11.	Houseman, B. et al. (2002). "Carbohydrate Arrays for the Evaluation of Protein Binding and Enzymatic Modification," Chemistry & Biology, 9:443-454.			
	12.	Wang, D. et al. (2002). "Carbohydrate microarrays for the recognition of cross-reactive molecular markers of microbes and host cells," Nature Biotechnology, 20:275-281.			
	13.	Hayashi et al. (2003). "Synthesis, designed assembly and biotinylation of sulfated oligosaccharide and its application to surface plasmon resonance," Tentative Lecture Proceedings, Chemical Society of Japan, 3 pages.			
	14.	Arano, A. et al. "Analysis of Binding Interaction Between Glycosaminoglycans and Proteins"			

Examiner Signature	/Taoliq Solola/	Date Considered	10/19/2009
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sf-2277656

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.S./

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/588,612
		Filing Date	February 4, 2005
		First Named Inventor	Yasuo SUDA
		Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
Sheet	2	of	2
		Attorney Docket Number	247322003700

		Using Surface Plasmon Resonance," Annual Meeting Syllabus of the Japanese Society of Carbohydrate Research, volume 22, 4 pages.	
	15.	Park, S. et al. (2004). "Carbohydrate Chips for Studying High-Throughput Carbohydrate-Protein Interactions," J. Am. Chem. Soc., 126:4812-4819.	
	16.	Kato, M. et al. (2004). "Using Model Substrates To Study the Dependence of Focal Adhesion Formation on the Affinity of Integrin-Ligand Complexes," Biochemistry, 43:2699-2707.	
	17.	Suda, Y. (2004). "Sugar Chip: Novel Bio Device for Finding Out Biofunction of Oligosaccharides," Polymer Preprints, Japan, volume 52, 11 pages.	
	18.	Ratner, D.M. et al. (2004). "Probing Protein—Carbohydrate Interactions with Microarrays of Synthetic Oligosaccharides," ChemBioChem, 5:379-383.	
	19.	Feizi, T. et al. (2004). "Oligosaccharide microarrays to decipher the glycol code," Nature, 5:582-588.	
	20.	Karamanska, R. et al. (2005). "Thioctic acid amides: convenient tethers for achieving low nonspecific protein binding to carbohydrates presented on gold surfaces," Chem. Commun., pp. 3334-3336.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Taofiq Solola/	Date Considered	10/19/2009
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